



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

September 23, 2004

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

TO: Interested Parties / Applicant

RE: NIPSCO Michigan City Generating Station / 091-19272-00021

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval – Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of a Title V operating permit or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency
401 M Street
Washington, D.C. 20406

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.



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September 23, 2004

Mr. Arthur Smith
NIPSCO Michigan City Generating Station
801 East 86th Avenue
Merrillville, IN 46410

Re: Significant Source Modification No:
091-19272-00021

Dear Mr. Smith:

NIPSCO Michigan City Generating Station applied for a Part 70 Operating Permit on September 19, 1996 for a stationary electric utility generating station. An application to reevaluate the potential to emit NO_x from that calculated for auxiliary boiler (AUX1) in SSM 091-16184-00021, issued on March 4, 2003 as well as correct the rating of auxiliary boiler (AUX1) from 120 million British thermal units per hour to 109 million British thermal units per hour was received on May 27, 2004. In addition, a NO_x emission limit for auxiliary boiler (AUX1) has been included in this modification to render the requirements of Major New Source Review not applicable. Pursuant to 326 IAC 2-7-10.5, the following are approved for the source:

- (a) In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-1.1-5 (Nonattainment New Source Review (NSR)) not applicable, the modification limits NO_x emissions from auxiliary boiler (AUX1) to no more than 36.8 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) Subsequent compliance determination, record keeping, and reporting requirements are required in this modification to demonstrate compliance with the PSD and Nonattainment NSR minor limit summarized in paragraph (a).
- (c) This modification has incorporated the applicable requirements from SSM 091-16184-00021, issued on March 4, 2003, that have not been otherwise revised or deleted.

The Significant Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3).

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, press 0 and ask for Michael S. Schaffer, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 631-691-3395, ext. 15 or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,

Original signed by
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

MSS/MES

cc: File - LaPorte County
U.S. EPA, Region V
LaPorte County Health Department
Northwest Regional Office
Air Compliance Section Inspector - Dan Hancock
Compliance Branch
Administrative and Development Section
Technical Support and Modeling - Michele Boner



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PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR QUALITY

**NIPSCO Michigan City Generating Station
101 North Wabash Street
Michigan City, Indiana 46360**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: SSM 091-19272-00021	
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: September 23, 2004

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SECTION A

SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in Conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary electric utility generating station.

Responsible Official:	Vice President/General Manager, Electric Supply
Source Address:	101 North Wabash Street, Michigan City, IN 46360
Mailing Address:	801 East 86 th Avenue, Merrillville, IN 46410
General Source Phone Number:	219-647-5252
SIC Code:	4911
County Location:	LaPorte
Source Location Status:	Nonattainment for ozone under the 8-hour standard Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules and Nonattainment NSR; Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

One (1) natural gas fired auxiliary boiler, equipped with low NO_x burners, identified as AUX1, exhausting to Stack AUX1, rated at: 109 million British thermal units per hour.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source modification does not include any insignificant activities as defined in 326 IAC 2-7-1(21).

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)] [326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) as follows:

In the event that the Part 70 application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:

- (a) If the Part 70 draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Part 70 draft.
- (b) If the Part 70 permit has gone thru final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go through a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Part 70 permit at the time of issuance.
- (c) If the Part 70 permit has gone through public notice, but has not gone through final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Part 70 permit, and the Title V permit will be issued after EPA review.

B.5 NSPS Reporting Requirement

Pursuant to the New Source Performance Standards (NSPS), Part 60.40, Subpart Db, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

- (a) Commencement of construction date (no later than 30 days after such date);
- (b) Actual start-up date (within 15 days after such date); and
- (c) Date of performance testing (at least 30 days prior to such date), when required by a condition elsewhere in this permit.

Reports are to be sent to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, IN 46206-6015

The application and enforcement of these standards have been delegated to the IDEM, OAQ. The requirements of 40 CFR Part 60 are also federally enforceable.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this approval:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times

that the emission unit vented to the control equipment is in operation.

Testing Requirements [326 IAC 2-7-6(1)]

C.6 Performance Testing [326 IAC 3-6] [326 IAC 2-1.1-11]

- (a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.7 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.9 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous emission monitoring systems (CEMS) and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

- (b) In the event that a breakdown of a continuous emission monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (c) Whenever a continuous emission monitor other than an opacity monitor is malfunctioning or will be down for calibration, maintenance, or repairs, the following shall be used as an alternative to continuous data collection:
 - (1) If the CEM is required for monitoring NO_x emissions pursuant to 40 CFR 75 (Title IV Acid Rain program) or 326 IAC 10-4 (NO_x Budget Trading Program), the Permittee shall comply with the relevant requirements of 40 CFR 75 Subpart D - Missing Data Substitution Procedures.
 - (2) If the CEM is not used to monitor NO_x emissions pursuant to 40 CFR 75 or 326 IAC 10-4, then supplemental or intermittent monitoring of the parameter shall be implemented as specified in Section D of this permit until such time as the emission monitor system is back in operation.
- (d) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 40 CFR Part 60. 40, Subpart Db.

C.10 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.11 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and the Northwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967
Northwest Regional Office:
Telephone Number: 219-757-0265
Facsimile Number: 219-757-0267

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
 - (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
 - (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
 - (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

C.12 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these

response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.13 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.14 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) The reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: One (1) auxiliary boiler

One (1) natural gas fired auxiliary boiler, equipped with low NO_x burners, identified as AUX1, exhausting to Stack AUX1, rated at: 109 million British thermal units per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

The provisions of 40 CFR 60 Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR 60 Subpart Db.

D.1.2 New Source Performance Standard (NSPS) [326 IAC 12] [40 CFR 60, Subpart Db]

Pursuant to 326 IAC 12 and 40 CFR 60, Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units), emissions from the one (1) auxiliary boiler shall not exceed the following:

One-tenths (0.10) pound NO_x per million Btu (MMBtu) heat input for a low heat release rate. This limitation is based on the equation in [40 CFR 60.44b(l)].

D.1.3 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the affected source, as designated by 40 CFR 63.7506(b). The Permittee must comply with these requirements on and after the effective date of 40 CFR 63, Subpart DDDDD.

D.1.4 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD]

(a) The affected source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, (40 CFR 63, Subpart DDDDD), as of the effective date of 40 CFR 63, Subpart DDDDD. Pursuant to this rule, the Permittee must comply with 40 CFR 63, Subpart DDDDD on and after three (3) years after the date of publication of the final rule for 40 CFR 63, Subpart DDDDD in the *Federal Register*.

(b) The following emissions unit comprises the affected source for the large gaseous fuel subcategory:

One (1) natural gas fired auxiliary boiler, equipped with low NO_x burners, identified as AUX1, exhausting to Stack AUX1, rated at: 109 million British thermal units per hour.

D.1.5 Particulate (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emissions Limitations for Facilities Constructed after September 21, 1983) the particulate emissions from the one (1) auxiliary boiler, rated at 109 million British thermal units per hour, shall be limited to 0.1125 pound per million British thermal units heat input.

This limitation is based on the following equation:

$$Pt = 1.09/Q^{0.26}$$

where:

- Pt = Pounds of particulate matter emitted per million British thermal units (lb/mmBtu) heat input
- Q = Total source maximum operating capacity rating in million British thermal units per hour (mmBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

The requirements of this condition shall supersede the requirements in Condition D.1.3 of SSM 091-16184-00021, issued on March 4, 2003.

D.1.6 Nitrogen Oxides (NO_x) Emissions Limitation [326 IAC 2-2] [326 IAC 2-1.1-5]

The NO_x emissions from the auxiliary boiler (AUX1) shall not exceed 36.8 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit shall render the requirements of Major New Source Review not applicable to the auxiliary boiler (AUX1).

Compliance Determination Requirements

D.1.7 NSPS Compliance Provisions [326 IAC 12] [40 CFR 60, Subpart Db]

- (a) The NO_x emission limitation in Condition D.1.2 apply at all times, including periods of startup, shutdown, and malfunction.
- (b) Compliance with the NO_x emission limitation in Condition D.1.2 shall be determined by the methods and procedures specified in 40 CFR 60.46b(e).

D.1.8 Emissions Monitoring [40 CFR 60, Subpart Db]

Pursuant to 40 CFR 60.47b and 60.48b (for Subpart Db), either:

- (a) a continuous monitoring system shall be calibrated, maintained, and operated for measuring NO_x from Stack AUX1, which meets the performance specifications of 326 IAC 3-5-2, or
- (b) a predictive emissions monitoring plan can be submitted to the Administrator according to 40 CFR 60.48b(g)(2) within 360 days from initial startup and the monitoring plan shall be used for determining compliance with the NO_x limits from Stack AUX1 contained in Condition D.1.2.

D.1.9 Continuous Emissions Monitoring System (CEMS) [326 IAC 3-5]

- (a) Pursuant to 326 IAC 3-5-1(d)(1), the Permittee is required to install a continuous emissions monitoring system or alternative monitoring plan to demonstrate compliance with Condition D.1.6 as allowed under the Clean Air Act and 326 IAC 3-5.
- (b) Pursuant to 326 IAC 3-5-1(f), the Permittee shall install, calibrate, certify, operate and maintain a continuous monitoring system for the stack designated as AUX1 in accordance with 326 IAC 3-5-2 and 3-5-3.
- (1) The continuous emissions monitoring system or alternative monitoring plan shall measure NO_x emissions rates in pounds per hour and/or pounds per million British thermal units. The use of continuous emissions monitoring system or alternative

monitoring plan to measure and record the NO_x hourly emission rates, is sufficient to demonstrate compliance with the 36.8 tons per twelve (12) consecutive month period NO_x emission limit in Condition D.1.6 with compliance determined at the end of each month.

- (2) The continuous emissions monitoring system or alternative monitoring plan shall be in operation at all times when the auxiliary boiler (AUX1) is in operation.
- (3) The Permittee shall record the output of the system and shall perform the required record keeping, pursuant to 326 IAC 3-5-6, and reporting, pursuant to 326 IAC 3-5-7.

D.1.10 CEMS or Alternative Monitoring Plan NO_x Missing Data Substitution [326 IAC 2-2] [326 IAC 2-1.1-5]

In order to demonstrate compliance with Condition D.1.6, whenever the NO_x CEMS or alternative monitoring plan is malfunctioning or is down for maintenance or repairs, until the NO_x CEMS or alternative monitoring plan is brought back online, the Permittee shall calculate the hourly NO_x emission rate using the following fuel usage equation, which includes the NO_x emission rate limit required in Condition D.1.2 and a maximum fuel heat content of 1,030 million British thermal units per million cubic foot of natural gas:

$$\text{NO}_x \text{ emissions (lbs/hr)} = \text{natural gas usage (MMCF/hr)} * 0.1 \text{ (lbs/mmBtu)} * 1,030 \text{ (mmBtu/MMCF)}$$

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

There are no specific Compliance Monitoring Requirements applicable to this emission unit.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.11 Record Keeping Requirements

- (a) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with 40 CFR 60.49b.
- (b) To document compliance with Condition D.1.6, the Permittee shall record the NO_x emissions from the auxiliary boiler (AUX1) each month.
- (c) To document compliance with Condition D.1.10, the source shall record the amount natural gas used each hour until CEMS or an alternative monitoring plan is back online.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.12 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters - Notification Requirements [40 CFR 63, Subpart DDDDD]

- (a) Pursuant to 40 CFR 63.7545(a) and 40 CFR 63.7506(b), the Permittee shall submit an Initial Notification containing the information specified in 40 CFR 63.9(b)(2) no later than 120 days after the date of publication of the final rule for 40 CFR 63, Subpart DDDDD in the *Federal Register*, as required by 40 CFR 63.7545(b).
- (b) The notification required by paragraph (a) shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

The notification requires the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

D.1.13 Reporting Requirements

- (a) To document compliance with Condition D.1.2, reports shall be submitted to the address listed in Section C - General Reporting Requirements, and shall contain the information required in 40 CFR 60.49b.
- (b) A quarterly summary of the information to document compliance with Condition D.1.6 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

**PART 70 SOURCE MODIFICATION
CERTIFICATION**

Source Name: NIPSCO Michigan City Generating Station
Source Address: 101 North Wabash Street, Michigan City, IN 46360
Mailing Address: 801 East 86th Avenue, Merrillville, IN 46410
Source Modification No.: SSM 091-19272-00021

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

- ☐ Test Result (specify) _____
- ☐ Report (specify) _____
- ☐ Notification (specify) _____
- ☐ Affidavit (specify) _____
- ☐ Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: NIPSCO Michigan City Generating Station
Source Address: 101 North Wabash Street, Michigan City, IN 46360
Mailing Address: 801 East 86th Avenue, Merrillville, IN 46410
Source Modification No.: SSM 091-19272-00021
Facility: Auxiliary Boiler (AUX1)
Parameter: NO_x Emissions
Limit: Not to exceed 36.8 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	NO _x Emissions (tons)	NO _x Emissions (tons)	NO _x Emissions (tons)
	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Significant Source Modification

Source Background and Description

Source Name:	NIPSCO Michigan City Generating Station
Source Location:	100 North Wabash Street, Michigan City, IN 46360
County:	LaPorte
SIC Code:	4911
Operation Permit No.:	T 091-6637-00021
Operation Permit Issuance Date:	Not Yet Issued
Significant Source Modification No.:	SSM 091-19272-00021
Permit Reviewer:	Michael S. Schaffer

The Office of Air Quality (OAQ) has reviewed a modification application from NIPSCO Michigan City Generating Station relating to an updated NO_x emission factor for the auxiliary boiler, permitted in SSM 091-16184-00021, issued on March 4, 2003.

NIPSCO has indicated that based on the initial performance test for the auxiliary boiler, SSM 091-16184 (which used vendor guarantee NO_x emission factors) underestimated the potential to emit NO_x from the auxiliary boiler. In addition, NIPSCO has also indicated that the auxiliary boiler is rated at 109 million British thermal units per hour rather than 120 million British thermal units per hour. As a result, the potential to emit NO_x of the auxiliary boiler must be reevaluated in this modification.

The following equipment is involved in this modification (changes to any permitted equipment appear as ~~strikeouts~~, new language appears in **bold** using the equipment list from SSM 091-16184).

One (1) natural gas fired auxiliary boiler, equipped with low NO_x burners, identified as AUX1, exhausting to Stack AUX1, rated at: ~~120~~ **109** million British thermal units per hour.

History

On October 1, 2002, NIPSCO Michigan City Generating Station submitted a modification application (SSM 091-16184-00021) to the OAQ requesting to add an additional natural gas fired auxiliary boiler to their existing plant.

On May 27, 2004 NIPSCO Michigan City Generating Station submitted a modification application (SSM 091-19272-00021) stating that based on the initial performance test for the auxiliary boiler, conducted on November 12, 2003 through December 12, 2003, the NO_x emission factor used to calculate the potential to emit in SSM 091-16184-00021, issued on March 4, 2003 underestimated NO_x emissions. In addition, NIPSCO stated that they installed an auxiliary boiler rated at 109 million British thermal units per hour rather than an auxiliary boiler rated at 120 million British thermal units per hour.

Due to the change in the NO_x emission factor for the auxiliary boiler, NIPSCO Michigan City Generating Station has elected to accept a NO_x emission limit of 36.8 tons per twelve (12) consecutive month period with compliance determined at the end of each month on the auxiliary boiler in order to render the requirements of Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review not applicable to SSM 091-16184-00021, issued on March 4, 2003.

This existing source submitted their Part 70 (T 091-6637-00021) application on September 19, 1996.

Existing Approvals

The source applied for a Part 70 Operating Permit on September 19, 1996. The source has been operating under previous approvals including, but not limited to, the following:

- (a) SSM 091-16184-00021, issued on March 4, 2003
- (b) AR 091-5301-00021, issued on December 31, 1997,
- (c) Exemption 091-8715-00021, and
- (d) Exemption 091-9566-00021.

Enforcement Issue

- (a) IDEM is aware that NIPSCO Michigan City Generating Station did not follow the procedures listed in Condition B.4(b) that were required in order to operate an auxiliary boiler of lower heat input capacity from that permitted by SSM 091-16185-00021, issued on March 4, 2003.

Condition B.4(b) of SSM 091-16185-00021 states: "If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued."

NIPSCO Michigan City Generating Station began operation of the auxiliary boiler rated at 109 rather than 120 million British thermal units per hour in 2003.

- (b) IDEM is reviewing these matters and will take appropriate action. This proposed approval is intended to satisfy the requirements of the construction and operating permit rules.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
AUX 1	Auxiliary Boiler	50.04	4.21	Variable	513

Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on May 27, 2004. Additional information was received on July 23, 2004.

Emission Calculations

See Pages 1 and 2 of 2 in Appendix A of this document for detailed emissions calculations.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	0.907
PM ₁₀	3.63
SO ₂	0.286
VOC	2.63
CO	40.1
NO _x	47.7

HAPs	Potential To Emit (tons/year)
Benzene	0.001
Dichlorobenzene	0.001
Formaldehyde	0.036
Hexane	0.859
Toluene	0.002
Lead	0.0002
Cadmium	0.0005
Chromium	0.0007
Manganese	0.0002
Nickel	0.001

HAPs	Potential To Emit (tons/year)
TOTAL	0.901

Justification for Modification

- (a) A Part 70 Significant Source Modification is proposed because the potential to emit CO and NO_x from the auxiliary boiler will exceed twenty five (25) tons per year. This modification is being performed pursuant to 326 IAC 2-7-10.5(f)(4).
- (b) The source was permitted to construct and operate a higher rated auxiliary boiler by SSM 091-16185-00021, issued on March 4, 2003, and thus, will be permitted to continue to operate the lower rated auxiliary boiler.

However, since the Part 70 Operating Permit for this source has not been issued yet, the intent of this Significant Source Modification is to revise and/or add limits as well as recording keeping and reporting requirements to SSM 091-16185-00021, issued on March 4, 2003.

In addition, this significant source modification will limit NO_x emissions from the auxiliary boiler to no more than 36.8 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit insures that the potential to emit of this modification is less than forty (40) tons of NO_x per year which renders the requirements of Major New Source Review not applicable.

As a result, the intent of this modification is also to satisfy the requirements for a significant permit modification pursuant 326 IAC 2-7-12(d), since requirements from SSM 091-16185-00021 are being revised in this significant source modification and the requirements of 326 IAC 2-7-12 would apply if the Part 70 Operating Permit was issued.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2001 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	Not Reported
PM ₁₀	1,289
SO ₂	10,279
VOC	75
CO	353
NO _x	10,691
HAP(Lead)	Not Reported

County Attainment Status

The source is located in LaPorte County.

Pollutant	Status
PM ₁₀	attainment
SO ₂	attainment
NO ₂	attainment
1-Hour Ozone	attainment
8-Hour Ozone	nonattainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. LaPorte County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for 326 IAC 2-1.1-5 (Nonattainment New Source Review).
- (b) LaPorte County has been classified as attainment or unclassifiable for PM₁₀, SO₂, NO₂, CO and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	Greater than 250
PM ₁₀	Greater than 250
SO ₂	Greater than 250
VOC	Less than 250
CO	Greater than 250
NO _x	Greater than 250

This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of one hundred (100) tons per year or more, and since this source is operating under one of the 28 listed source categories.

These emissions are based upon NIPSCO Michigan Generating Station's Annual Source Emission Statement.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

Process/facility	Potential to Emit (tons/year)						
	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
109 mmBtu/hr Auxiliary Boiler	0.699	2.80	0.221	2.02	30.9	36.8	0.694
PSD, Offset or Nonattainment NSR Significant Level	25	15	40	40	100	40	-

This modification to an existing major stationary source is not major because the emission increases will be limited to less than the PSD and nonattainment new source review significant levels as follows:

In order to limit this modification to less than forty (40) tons of NO_x per year, the NO_x emissions from auxiliary boiler (AUX1), shall not exceed 36.8 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Therefore, pursuant to 326 IAC 2-2 and 326 IAC 2-1.1-5, the major new source review requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source has submitted their Part 70 (T 091-6637-00021) application on September 19, 1996. The auxiliary boiler being reviewed under this permit shall be incorporated in the submitted Part 70 application.

Federal Rule Applicability

- (a) The one (1) natural gas fired auxiliary boiler, equipped with low NO_x burners, identified as AUX1, is subject to the New Source Performance Standard, 326 IAC 12, 40 CFR Part 60. 40, Subpart Db, because the boiler will be installed after the rule applicability date of June 19, 1984 and is rated at greater than one-hundred (100) million British thermal units per hour, but less than two-hundred fifty (250) million British thermal units per hour.
- (1) Pursuant to 40 CFR 60.44b(l), no owner or operator of an affected facility that combusts natural gas shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides (NO_x) in excess of 0.10 pounds per million British thermal units heat input, for a low heat release rate. The nitrogen oxide standards under this section apply at all times including periods of

startup, shutdown, or malfunction. This limitation is based on the equation in [40 CFR 60.44b(l)].

- (2) Compliance with the NO_x emission limitation shall be determined by the methods and procedures specified in 40 CFR 60.46b(e), which requires the installation of a continuous monitoring system. Pursuant to 40 CFR 60.47b and 60.48b (for Subpart Db), a continuous monitoring system shall be calibrated, maintained, and operated for measuring NO_x, which meets the performance specifications of 326 IAC 3-5-2, or a predictive emissions monitoring plan can be submitted to the Administrator according to 40 CFR 60.48b(g)(2) within 360 days from initial startup and the monitoring plan shall be used for determining compliance with the NO_x limit from Stack AUX1.
 - (3) The owner or operator shall keep records pursuant to 40 CFR 60.49b.
- (b) At the time SSM 091-16184-00021 was issued, the requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) were applicable to this source because the source was a major source of hazardous air pollutant (HAP) emissions (i.e., the source has the potential to emit 10 tons per year or greater of a single HAP or 25 tons per year or greater of a combination of HAPs).

However, it is now known that the one (1) auxiliary boiler, identified as AUX1 is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD. The one (1) auxiliary boiler comprises one existing affected source for the large gaseous fuel subcategory, as defined by 40 CFR 63.7506(b), because it meets the criteria in the definition in 40 CFR 63.7575 for the large gaseous fuel subcategory.

Note that since NIPSCO Michigan City Generating Station's contract for auxiliary boiler (AUX1) was effective on October 19, 2002, IDEM, OAQ has determined that auxiliary boiler (AUX1) commenced construction prior to January 13, 2003. Therefore, auxiliary boiler (AUX1) pursuant to 40 CFR 63.7490(d), is not considered a new boiler under 40 CFR 63, Subpart DDDDD.

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the affected source after the effective date of 40 CFR 63, Subpart DDDDD, except when otherwise specified in 40 CFR 63 Subpart DDDDD. This rule is not yet published in the *Federal Register*. A copy of the signed, final rule is available at <http://www.epa.gov/ttn/atw/boiler/boilerpg.html>.

Pursuant to 40 CFR 63.7506(b), the only requirements that apply to the existing affected source for the large gaseous fuel subcategory are the initial notification requirements in 40 CFR 63.9(b). The Permittee shall submit an Initial Notification containing the information specified in 40 CFR 63.9(b)(2) no later than 120 days after the date of publication of the final rule for 40 CFR 63, Subpart DDDDD in the *Federal Register*, as required by 40 CFR 63.7545(b).

As a result of the preceding, the Part 2 MACT Application requirements from Condition C.15 in SSM 091-16184-00021, issued on March 4, 2003 will not be included in this modification.

State Rule Applicability - Individual Facilities

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

326 IAC 2-1.1-5 (Nonattainment New Source Review)

- (a) This source is one of the 28 listed source categories and therefore, fugitive emissions are counted toward the determination of PSD applicability.
- (b) In order to limit the potential to emit from the proposed modification to less than forty (40) tons of NO_x per year, the following limits are proposed for auxiliary boiler (AUX1):

The NO_x emissions from auxiliary boiler (AUX1), shall not exceed 36.8 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with this limit will render the requirements of Major New Source Review not applicable to this modification.

326 IAC 3-5 (Continuous Monitoring of Emissions)

Pursuant to 326 IAC 3-5, continuous monitoring system for the one (1) auxiliary boiler shall be calibrated, maintained and operated for measuring NO_x emission rates in pounds per hour and/or pounds per million British thermal units heat input from Stack AUX1 in accordance with performance specifications in 326 IAC 3-5-2.

Note that the Permittee has installed and is currently operating a NO_x continuous emissions monitoring system (CEMS) at Stack AUX1.

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)

The one (1) natural gas fired auxiliary boiler rated at 109 million British thermal units per hour, must comply with the requirements of 326 IAC 6-2-4.

The above emission limitation is based on the following equation given in 326 IAC 6-2-4:

$$Pt = 1.09/Q^{0.26}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/mmBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (mmBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

The total heat input capacity for the source, including the one (1) 109 million British thermal units per hour boiler, is 6,205 million British thermal units per hour.

$$Pt = 1.09/(6,205)^{0.26} = 0.1125 \text{ lb/mmBtu heat input}$$

Based on page 1 of Appendix A, the potential PM emission rate is:

$$0.907 \text{ ton/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) = 0.207 \text{ lb/hr}$$
$$(0.207 \text{ lb/hr} / 6,205 \text{ mmBtu/hr}) = 0.00003 \text{ lb PM per mmBtu}$$

Therefore, the one (1) auxiliary boiler identified as AUX1, will comply with this rule.

326 IAC 10-4 (NO_x Budget Trading Program)

The one (1) auxiliary boiler is not subject to the requirements of 326 IAC 10-4 (NO_x Budget Trading Program) because this boiler is not used to produce electricity.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no specific Compliance Monitoring requirements for auxiliary boiler (AUX1).

Changes To Existing Source Modification

Since the primary purpose of this modification is to reevaluate the potential to emit of the auxiliary boiler, as well as the state and federal rules applicable to the auxiliary boiler, the permit conditions proposed are consistent with the requirements of SSM 091-16184-00021, issued on March 4, 2003. Changed, A, C, and D Section conditions from SSM 091-16184-00021 as a result of this modification will appear with deletions as ~~strikeouts~~ and new language in **bold** as follows:

Change 1:

Since this LaPorte has been designated as nonattainment for ozone under the 8-hour standard as of June 15, 2004, the source location status and source status in Condition A.1 will be revised in this modification as follows:

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary electric utility generating station.

Responsible Official:	Vice President/General Manager, Electric Supply
Source Address:	100 North Wabash Street, Michigan City, IN 46360
Mailing Address:	801 East 86 th Avenue, Merrillville, IN 46410
General Source Phone Number:	219-647-5252
SIC Code:	4911

County Location: LaPorte
Source Location Status: **Nonattainment for ozone under the 8-hour standard**
Attainment for all **other** criteria pollutants
Source Status: Part 70 Permit Program
Major Source, under PSD Rules **and Nonattainment NSR**;
Major Source, Section 112 of the Clean Air Act
1 of 28 Source Categories

Change 2:

Since the NIPSCO Michigan City Generating Station has installed an auxiliary boiler that is rated at 109 million British thermal units per hour rather than 120 million British thermal units per hour, Condition A.2 and the equipment description box in Section D.1 will be revised as follows:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
[326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

One (1) natural gas fired auxiliary boiler, equipped with low NO_x burners, identified as AUX1, exhausting to Stack AUX1, rated at: ~~120~~ **109** million British thermal units per hour.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: One (1) auxiliary boiler

One (1) natural gas fired auxiliary boiler, equipped with low NO_x burners, identified as AUX1, exhausting to Stack AUX1, rated at: ~~120~~ **109** million British thermal units per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Change 3:

Since SSM 091-16184-00021, issued on March 4, 2003 is the construction approval for auxiliary boiler (AUX1), a construction approval is not necessary for this modification. Therefore, Condition B.4 has been revised in this modification as follows:

B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) ~~when, prior to start of operation, the following requirements are met as follows:~~

- (a) ~~The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.~~
- (b) ~~If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.~~

- ~~(c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.~~
- ~~(d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.~~
- (e) In the event that the Part 70 application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:
 - (1) (a) If the Part 70 draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Part 70 draft.
 - (2) (b) If the Part 70 permit has gone thru final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go through a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Part 70 permit at the time of issuance.
 - (3) (c) If the Part 70 permit has not gone through public notice, but has not gone through final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Part 70 permit, and the Title V permit will be issued after EPA review.

Change 4:

Since the issuance of SSM 091-16185, the Northwest Regional Office has relocated from Gary, Indiana to Merrillville, Indiana. As a result, the phone numbers for the Northwest Regional in Condition C.11(b)(4) will be revised in this modification as follows:

C.11 Emergency Provisions [326 IAC 2-7-16]

- (b) (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, **and the** Northwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967
Northwest Regional Office:
Telephone Number: 219-881-6712 **757-0265**
Facsimile Number: 219-881-6745 **757-0267**

Change 5:

Since It has been determined that the auxiliary boiler (AUX1) is subject to 40 CFR 63, Subpart DDDDD, the requirements for a Part 2 MACT Application in Condition C.15 will not be included in this modification and Conditions D.1.3, D.1.4 and D.1.12 will be added as follows:

~~C.15 Application Requirements for Section 112(j) of the Clean Air Act [40 CFR 63.52(e)][40 CFR 63.56(a)]
[40 CFR 63.9(b)] [326 IAC 2-7-12]~~

- ~~(a) The Permittee shall submit a Part 2 MACT Application in accordance with 40 CFR 63.52(e)(1). The Part 2 MACT Application shall meet the requirements of 40 CFR 63.53(b).~~
- ~~(b) Notwithstanding paragraph (a), the Permittee is not required to submit a Part 2 MACT Application if the Permittee no longer meets the applicability criteria of 40 CFR 63.50 by the application deadline in 40 CFR 63.52(e)(1). For example, the Permittee would not have to submit a Part 2 MACT Application if, by the application deadline:~~
- ~~(1) The source is no longer a major source of hazardous air pollutants, as defined in 40 CFR 63.2;~~
- ~~(2) The source no longer includes one or more units in an affected source category for which the U.S. EPA failed to promulgate an emission standard by May 15, 2002; or~~
- ~~(3) The MACT standard or standards for the affected source categories included at the source are promulgated.~~
- ~~(c) Notwithstanding paragraph (a), pursuant to 40 CFR 63.56(a), the Permittee shall comply with an applicable promulgated MACT standard in accordance with the schedule provided in the MACT standard if the MACT standard is promulgated prior to the Part 2 MACT Application deadline or prior to the issuance of permit with a case-by-case Section 112(j) MACT determination. The MACT requirements include the applicable General Provisions requirements of 40 CFR 63, Subpart A. Pursuant to 40 CFR 63.9(b), the Permittee shall submit an initial notification not later than 120 days after the effective date of the MACT, unless the MACT specifies otherwise. The initial notification shall be submitted to:~~

~~Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015~~

~~and~~

~~United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590~~

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.3 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the affected source, as designated by 40 CFR 63.7506(b). The Permittee must comply with these requirements on and after the effective date of 40 CFR 63, Subpart DDDDD.

D.1.4 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD]

- (a) The affected source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, (40 CFR 63, Subpart DDDDD), as of the effective date of 40 CFR 63, Subpart DDDDD. Pursuant to this rule, the Permittee must comply with 40 CFR 63, Subpart

DDDDD on and after three (3) years after the date of publication of the final rule for 40 CFR 63, Subpart DDDDD in the *Federal Register*.

- (b) The following emissions unit comprises the affected source for the large gaseous fuel subcategory:**

One (1) natural gas fired auxiliary boiler, equipped with low NO_x burners, identified as AUX1, exhausting to Stack AUX1, rated at: 109 million British thermal units per hour.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.12 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters - Notification Requirements [40 CFR 63, Subpart DDDDD]

- (a) Pursuant to 40 CFR 63.7545(a) and 40 CFR 63.7506(b), the Permittee shall submit an Initial Notification containing the information specified in 40 CFR 63.9(b)(2) no later than 120 days after the date of publication of the final rule for 40 CFR 63, Subpart DDDDD in the *Federal Register*, as required by 40 CFR 63.7545(b).**

- (b) The notification required by paragraph (a) shall be submitted to:**

**Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015**

and

**United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590**

The notification requires the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Change 6:

Due to the change in the rating of the auxiliary boiler the limit in Condition D.1.3 (now Condition D.1.5) will be revised as follows:

D.1.3 5 Particulate (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emissions Limitations for Facilities Constructed after September 21, 1983) the particulate emissions from the one (1) auxiliary boiler, rated at ~~420~~ **109** million British thermal units per hour, shall be limited to 0.1125 pound per million British thermal units heat input.

This limitation is based on the following equation:

$$Pt = 1.09/Q^{0.26}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/mmBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (mmBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

The requirements of this condition shall supersede the requirements in Condition D.1.3 of SSM 091-16184-00021, issued on March 4, 2003.

Change 7:

Since a NO_x emission limit on auxiliary boiler (AUX1) is going to be required to render the requirements of Major New Source Review not applicable to this modification, Conditions D.1.6, D.1.9, D.1.10, D.1.11(b) and (c) (formerly Condition D.1.6), and D.1.13(c) (formerly Condition D.1.7(c)) as well as a subsequent quarterly report form will be added as follows:

D.1.6 Nitrogen Oxides (NO_x) Emission Limitation [326 IAC 2-2] [326 IAC 2-1.1-5]

The NO_x emissions from auxiliary boiler (AUX1) shall not exceed 36.8 tons twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit shall render the requirements of Major New Source Review not applicable to auxiliary boiler (AUX1).

D.1.9 Continuous Emissions Monitoring System (CEMS) [326 IAC 3-5]

- (a) Pursuant to 326 IAC 3-5-1(d)(1), the Permittee is required to install a continuous emissions monitoring system or alternative monitoring plan to demonstrate compliance with Condition D.1.6 as allowed under the Clean Air Act and 326 IAC 3-5.
- (b) Pursuant to 326 IAC 3-5-1(f), the Permittee shall install, calibrate, certify, operate and maintain a continuous monitoring system for the stack designated as AUX1 in accordance with 326 IAC 3-5-2 and 3-5-3.
 - (1) The continuous emissions monitoring system or alternative monitoring plan shall measure NO_x emissions rates in pounds per hour and/or pounds per million British thermal units. The use of continuous emissions monitoring system or alternative monitoring plan to measure and record the NO_x hourly emission rates, is sufficient to demonstrate compliance with the 36.8 tons per twelve (12) consecutive month period with compliance determined at the end of each month NO_x emission limit in Condition D.1.6.
 - (2) The continuous emissions monitoring system or alternative monitoring plan shall be in operation at all times when auxiliary boiler (AUX1) is in operation.
 - (3) The Permittee shall record the output of the system and shall perform the required record keeping, pursuant to 326 IAC 3-5-6, and reporting, pursuant to 326 IAC 3-5-7.

D.1.10 CEMS or Alternative Monitoring Plan NO_x Missing Data Substitution [326 IAC 2-2] [326 IAC 2-1.1-5]

In order to demonstrate compliance with Condition D.1.6, whenever the NO_x CEMS or alternative monitoring plan is malfunctioning or is down for maintenance or repairs, until the NO_x CEMS or alternative monitoring plan is brought back online, the Permittee shall calculate the hourly NO_x emission rate using the following fuel usage equation, which includes the NO_x emission rate limit required in Condition D.1.2 and a maximum fuel heat content of 1,030 million British thermal units per million cubic foot of natural gas:

$$\text{NO}_x \text{ emissions (lbs/hr)} = \text{natural gas usage (MMCF/hr)} * 0.1 \text{ (lbs/mmBtu)} * 1,030 \text{ (mmBtu/MMCF)}$$

D.1.6 11 Record Keeping Requirements

- (a) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with 40 CFR 60.49b.
- (b) To document compliance with Condition D.1.6, the Permittee shall record the NO_x emissions used at auxiliary boiler (AUX1) each month.
- (c) To document compliance with Condition D.1.10, the source shall record the amount natural gas used each hour until CEMS or an alternative monitoring plan is back online.
- ~~(b)~~ (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.7 13 Reporting Requirements

- (a) To document compliance with Condition D.1.2, reports shall be submitted to the address listed in Section C - General Reporting Requirements, and shall contain the information required in 40 CFR 60.49b.
- (b) The natural gas boiler certification shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or it's equivalent, within thirty (30) days after the end of the six (6) month period being reported. The natural gas-fired boiler certification does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) A quarterly summary of the information to document compliance with Condition D.1.6 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: NIPSCO Michigan City Generating Station
Source Address: 100 North Wabash Street, Michigan City, IN 46360
Mailing Address: 801 East 86th Avenue, Merrillville, IN 46410
Source Modification No.: SSM 091-19272-00021
Facility: Auxiliary Boiler (AUX1)
Parameter: NO_x Emissions
Limit: Not to exceed 36.8 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	NO _x Emissions (tons)	NO _x Emissions (tons)	NO _x Emissions (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Conclusion

The operation of auxiliary boiler (AUX1) shall be subject to the conditions of the attached proposed Significant Source Modification No. 091-19272-00021.

**Indiana Department of Environmental Management
Office of Air Quality**

Addendum to the Technical Support Document for a
Significant Source Modification to a Part 70 Operating Permit

Source Name:	NIPSCO Michigan City Generating Station
Source Location:	101 North Wabash Street, Michigan City, IN 46360
County:	LaPorte
SIC Code:	4911
Operation Permit No.:	T 091-6637-00021
Significant Source Modification No.:	SSM 091-19272-00021
Permit Reviewer:	Michael S. Schaffer

On August 12, 2004, the Office of Air Quality (OAQ) had a notice published in the News Dispatch, located in Michigan City, Indiana, stating that NIPSCO Michigan City Generating Station had applied for a Significant Source Modification to a Part 70 Operating Permit to reevaluate the unrestricted potential to emit of the one (1) auxiliary boiler, identified as AUX1, due to an underestimation of potential NO_x emissions in SSM 091-16184-00021, issued on March 4, 2003. The notice also stated that OAQ proposed to issue a Significant Source Modification and provided information on how the public could review the proposed Significant Source Modification and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Significant Source Modification to a Part 70 Operating Permit should be issued as proposed.

On May 12, 2004, Mr. Kelly R. Carmichael, Principal, Environmental, Health & Safety, NISource Corporate Services Company, submitted comments on the proposed Significant Source Modification to a Part 70 Operating Permit. The comments are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1:

The new source address for this source is 101 North Wabash Street.

Response 1:

The source address has been changed from "100" to "101" in Condition A.1 as follows:

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

Source Address: 10**01** North Wabash Street, Michigan City, IN 46360

Note this change will also be made to both the Certification and Quarterly Report Form at the end of the permit.

Comment 2:

Please add the alternative monitoring plan option to Condition C.9.

Response 2:

NIPSCO Michigan City Generating Station did not request that an alternative monitoring plan be added to Condition C.9 during the comment period for SSM 091-16184-00021, issued on March 4, 2003. This modification is being performed as a revision to SSM 091-16184-00021 because the Part 70 Operating Permit has not yet been issued. Since this NIPSCO Michigan City Generating

Station modification application, received by IDEM, OAQ on May 27, 2004, only contained a request to revise Section D.1 of SSM 091-16184-00021, Condition C.9 will not be revised at this time.

However, since the Part 70 Operating Permit has not yet been issued, IDEM, OAQ will make a determination as to whether or not additional alternative monitoring plan requirements should be added to Section C of the Part 70 Operating Permit prior to issuing the Part 70 Operating Permit.

Comment 3:

Although technically correct, Condition D.1.4(a) is a bit confusing because the only requirement is applicable to the affected source is for the Permittee to submit a notification with 120 days after publication in the *Federal Register*. Nothing is really required in 3 years.

Response 3:

The contents of Condition D.1.4(a) are correct. IDEM, OAQ agrees that the Permittee is only required to submit an Initial Notification within 120 days after 40 CFR 63, Subpart DDDDD is published in the *Federal Register* since the auxiliary boiler, identified as AUX1, is an existing affected source under the large gaseous fuel category.

However, IDEM, OAQ has determined that Condition D.1.4(a) should be included in any Part 70 Operating Permit for all existing affected sources that are subject 40 CFR 63, Subpart DDDDD regardless of the subcategory. Since the contents of Condition D.1.4(a) are accurate and there are no compliance issues that will result from the inclusion of Condition D.1.4(a), Condition D.1.4(a) will not be deleted from this modification.

Comment 4:

The word “per” appears to be missing from Condition D.1.6.

Response 4:

Condition D.1.6 will be revised to include the words “the” and “per” as follows:

D.1.6 Nitrogen Oxides (NO_x) Emissions Limitation [326 IAC 2-2] [326 IAC 2-1.1-5]

The NO_x emissions from **the** auxiliary boiler (AUX1) shall not exceed 36.8 tons **per** twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit shall render the requirements of Major New Source Review not applicable to **the** auxiliary boiler (AUX1).

Comment 5:

NO_x emissions should not really be listed as “used” in Condition D.1.11(b).

Response 5:

The term “used at” will be replaced with “from the” in Condition D.1.11(b). In addition word “of” will be added after the word “amount” in Condition D.1.11(c). Conditions D.1.11(b) and (c) will be revised as follows:

D.1.11 Record Keeping Requirements

- (b) To document compliance with Condition D.1.6, the Permittee shall record the NO_x emissions ~~used at~~ **from the** auxiliary boiler (AUX1) each month.
- (c) To document compliance with Condition D.1.10, the source shall record the amount **of** natural gas used each hour until CEMS or an alternative monitoring plan is back online.

Comment 6:

Since the auxiliary boiler, identified as AUX1, only combust natural gas, Condition D.1.13(b) should be deleted. There is no need to report every six (6) months.

Response 6:

IDEM, OAQ agrees. Condition D.1.13(b) and the boiler certification form will be deleted as follows:

D.1.13 Reporting Requirements

- (a) To document compliance with Condition D.1.2, reports shall be submitted to the address listed in Section C - General Reporting Requirements, and shall contain the information required in 40 CFR 60.49b.
- ~~(b) The natural gas boiler certification shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or it's equivalent, within thirty (30) days after the end of the six (6) month period being reported. The natural gas-fired boiler certification does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~
- (c) (b)** A quarterly summary of the information to document compliance with Condition D.1.6 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
SEMI-ANNUAL NATURAL GAS-FIRED BOILER CERTIFICATION**

Source Name: _____ NIPSCO Michigan City Generating Station
Source Address: _____ 100 North Wabash Street, Michigan City, IN 46360
Mailing Address: _____ 801 East 86th Avenue, Merrillville, IN 46410
Source Modification No.: _____ SSM 091-19272-00021

☒ Natural Gas Only
☒ Alternate Fuel burned
From: _____ To: _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

Upon further review, the OAQ has decided to make the following changes to the Significant Source Modification to a Part 70 Operating Permit: The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language is **bolded**):

Change:

In Condition D.1.9(b)(1), the term "NO_x emission limit in Condition D.1.6" has been moved from the end of the sentence to after the word "period." In addition, the word "the" has been added after word "when" in Condition D.1.9(b)(2). The changes to Condition D.1.9(b) are as follows:

D.1.9 Continuous Emissions Monitoring System (CEMS) [326 IAC 3-5]

- (b) Pursuant to 326 IAC 3-5-1(f), the Permittee shall install, calibrate, certify, operate and maintain a continuous monitoring system for the stack designated as AUX1 in accordance with 326 IAC 3-5-2 and 3-5-3.
 - (1) The continuous emissions monitoring system or alternative monitoring plan shall measure NO_x emissions rates in pounds per hour and/or pounds per million British thermal units. The use of continuous emissions monitoring system or alternative monitoring plan to measure and record the NO_x hourly emission rates, is sufficient to demonstrate compliance with the 36.8 tons per twelve (12) consecutive month period **NO_x emission limit in Condition D.1.6** with compliance determined at the end of each month. ~~NO_x emission limit in Condition D.1.6.~~
 - (2) The continuous emissions monitoring system or alternative monitoring plan shall be in operation at all times when **the** auxiliary boiler (AUX1) is in operation.
 - (3) The Permittee shall record the output of the system and shall perform the required record keeping, pursuant to 326 IAC 3-5-6, and reporting, pursuant to 326 IAC 3-5-7.

**Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR >100**

Page 1 of 2 TSD App A

Company Name: NIPSCO Michigan City Generating Station
Address City IN Zip: 100 North Wabash Street, Michigan City, Indiana 46360
Permit Number: SSM 091-19272
Plt ID: 091-00021
Reviewer: Michael S. Schaffer
Application Date: May 27, 2004

Auxiliary Boiler (AUX1)

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Limited Throughput MMCF/yr
109	926.5	714.5

Pollutant						
Emission Factor in lb/MMCF	PM* 1.9	PM10* 7.6	SO2 0.6	NOx** 103.0 **see below	VOC 5.5	CO 84.0
Potential Emission in tons/yr	0.880	3.52	0.278	47.7	2.55	38.9
Limited Potential Emission in tons/yr	0.679	2.72	0.214	36.8	1.96	30.0

*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.

**NOx Emission Factor is based on the 0.1 lb/mmBtu limit required by NSPS Subpart Db for this emission unit in combination with a maximum natural gas heat content of 1,030 mmBtu/MMCF

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,030 MMBtu

Limited Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 6,752 hrs/yr x 1 MMCF/1,030 MMBtu

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-01-006-01, 1-01-006-04 (AP-42 Supplement D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 2 for HAPs emissions calculations.

**Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR >100
HAPs Emissions**

Page 2 of 2 TSD App A

Company Name: NIPSCO Michigan City Generating Station
Address City IN Zip: 100 North Wabash Street, Michigan City, Indiana 46360
Permit Number: SSM 091-19272
Plt ID: 091-00021
Reviewer: Michael S. Schaffer
Application Date: May 27, 2004

Auxiliary Boiler (AUX1)

HAPs - Organics

Emission Factor in lb/MMcf	Benzene 0.002	Dichlorobenzene 0.001	Formaldehyde 0.075	Hexane 1.80	Toluene 0.003
Potential Emission in tons/yr	0.001	0.001	0.035	0.834	0.002
Limited Potential Emission in tons/yr	0.0008	0.0004	0.027	0.643	0.001

HAPs - Metals

Emission Factor in lb/MMcf	Lead 0.001	Cadmium 0.001	Chromium 0.001	Manganese 0.0004	Nickel 0.002	Total
Potential Emission in tons/yr	0.0002	0.0005	0.0006	0.0002	0.001	0.874
Limited Potential Emission in tons/yr	0.0002	0.0004	0.0005	0.0001	0.0008	0.674

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.